

**ABSTRACT OF THE DISCLOSURE**

An optical component formed from a fiber directly coupled to a photodiode without any intervening optical components such as mirrors or lenses is disclosed. The optical component includes a stripped optical fiber having a core with  
5 a flat distal end that extends through a ferrule. The distal flat end of the core is printed with an annular coating of metal leaving a central portion of the core uncovered. The coated flat end of the core is initially aligned with an aperture or active area of a rear side of a back-illuminated photodiode which also includes a coating of metal. With the two parts in abutting engagement, a reflow or a partial  
10 melting process is carried out to directly couple the fiber core to the photodiode.